

Amendments to the Specification:

Page 8, second paragraph:

Thus, upon registration, the third party cache provides the CDN given information as indicated in **Figure 3**. Preferably, a registration server 303a-n **[[305]]** is used for this purpose. The registration server may be a Pentium-based box running the Linux operating system and Apache web server software. The information provided by the cache may include data **306** identifying the machine as public or private. In addition, the cache may provide the CDN service restriction data **308**, which is a list of CIDR blocks that it (as a public machine) is willing to serve. If the cache restricts traffic, then the CDN must respect such restrictions. In addition, the cache preferably also provides the CDN block/pass through IP data **310**. In particular, a blocking cache will not report its own IP address to the CDN or any of its clients' IP addresses. Upon registration, the cache may also provide the CDN with contact data **312**, e.g., name, phone number, and email, of the technical contact responsible for the cache. In addition, the cache preferably provides the CDN performance characteristic data **314**. A flexible protocol may be used for this purpose so that the CDN can ask the cache dynamically to provide performance and health statistics, and the cache can reply with the statistics it can provide. Additionally, if the cache can provide a metric, preferably it informs the CDN of the bounds of that metric during the registration process. For example, if the cache reports bits/second outgoing and its maximum link capacity, then the CDN may use this information later to estimate how close the cache is to its limits. Finally, the cache may provide the CDN a cache identifier **316** to facilitate initial registration or a renewal of a

registration.

The CDN preferably provides cache 302 [the CDN] with given information during the registration process. As also illustrated in **Figure 3**, preferably the CDN provides the cache with a time-to-live (TTL) indication **318**, which controls how long the registration is valid. Following expiration of the TTL, the cache may need to re-register to keep itself current. In addition, the CDN preferably provides the cache given configuration information including log recipient and frequency **320**, RT (real-time) statistics recipient and frequency data **322**, a map URL **324**, and content parsing information **326**. The log recipient and frequency data **320** identifies the frequency (e.g., every 4 hours) that logs will be transmitted from the cache to the CDN. The RT statistics recipient and frequency data **322** is preferably a function of both time and number of hits. If the cache has not seen a requisite number of hits in a period, then it need not send an RT update and may continue to aggregate hits until a next update period (e.g., every 30 seconds). The map URL **324** identifies a location of a network map within the CDN. Once the cache is configured into the CDN, it becomes a server in the CDN network map and, as such, may assume responsibility (i.e., become "authoritative") for delivering content. The map's default TTL is preferably long (e.g., one month). The content parsing data **326** is the information needed to identify CDN-provisioned content and to fetch it correctly as will be described below. Generally, this information includes a list of CDN-specific domain names, and a set of regular expressions (e.g., typecode, content provider code, a serial number code, or the like) for parsing CDN-specific embedded object URLs for tracking usage statistics. In addition,

the CDN preferably also provides the cache a generic format that can be used by the cache to construct a CDN-specific host name, e.g., based on the typecode, content provider code, serial number code, or the like. In particular, and as described below, in order to fetch content from the CDN, the cache constructs a CDN-specific host name. During registration, the CDN thus provides the cache with the appropriate template for constructing this host-name. Finally, the CDN may provide a cache identifier (ID) **328** if this is not a renewal registration.